DIRECT TESTIMONY OF
MARTIN K. PHALEN
ON BEHALF OF
SOUTH CAROLINA ELECTRIC & GAS COMPANY
DOCKET NO. 2009-5-G

Q. PLEASE STATE YOUR NAME, BUSINESS ADDRESS AND POSITION.

A. My name is Martin K. Phalen, and my current business address is 1426 Main Street, Columbia, South Carolina. Effective October 2009, my address will be 100 SCANA Parkway, Cayce, South Carolina. I am employed by South Carolina Electric & Gas Company ("SCE&G" or the "Company") as Vice President, Gas Operations.

Q. PLEASE DESCRIBE YOUR EDUCATIONAL AND BUSINESS BACKGROUND.

A. Following my graduation from the College of Charleston in 1977, I was employed with Cummins Engine Company in Charleston, South Carolina, where I held various management and executive-level positions. In 1988, I joined SCE&G. Since that time, I have held executive-level positions in Human Resources & Administration, Operational Support, and, effective May 2003, Gas Operations. I am a former member of the Board of Directors for the Southeastern Electric Exchange, a current member of the Executive Council for the Southern Gas Association, and a member of the Southern Gas Association's distance learning committee.

Q. WHAT ARE YOUR DUTIES AS VICE PRESIDENT, GAS OPERATIONS?

A. As Vice President, Gas Operations for SCE&G, my corporate responsibilities include, among other things, oversight of the daily operations of SCE&G's natural gas distribution system, including maintenance and construction. Additionally, I am responsible for the overall reliability of the system, which includes ensuring that the system is capable of providing safe and reliable service to our customers.

Q. WHAT IS THE PURPOSE OF THIS PURCHASED GAS ADJUSTMENT ("PGA") PROCEEDING?

A. By Order No. 87-898, dated August 14, 1987, the Public Service Commission of South Carolina ("Commission") instituted an annual PGA review of SCE&G's gas purchasing policies and practices. These PGA reviews are conducted to determine the prudence of SCE&G's gas purchasing policies and practices during the period under review and to determine if SCE&G properly applied its tariffs in recovering its gas costs.

It is worth noting that in every PGA review, the Commission has found that SCE&G's gas purchasing policies and practices were prudent and that the Company properly adhered to the gas cost recovery provisions of its gas tariff and applicable Commission directives and orders.

In this PGA proceeding, the Commission will hear from personnel who implement SCE&G's gas purchasing practices and policies and who address tariff issues on a day-to-day basis. Their testimony specifically relates to the period under review, March 1, 2008 through July 31, 2009 ("Review Period"). Rose

Jackson, General Manager – Gas Supply & Capacity Management, explains SCE&G's gas purchasing practices, gas supply and interstate pipeline capacity, followed by a discussion on financial hedging. Keith C. Coffer, Jr., Assistant Controller for SCE&G, discusses the conversion of the PGA administration process from a cycle month sales calculation basis to a calendar month sales calculation basis and addresses the appropriateness of this change in methodology. Alice A. Fox, Manager of Regulatory Accounting and Gas Rates, discusses the PGA methodology for recovering the cost of gas implemented by the Company pursuant to Commission Order No. 2006-679.

Q. PLEASE DESCRIBE THE PURPOSE OF YOUR TESTIMONY.

A. The purpose of my testimony is to describe SCE&G's natural gas distribution system from an operating standpoint and discuss the primary facilities that comprise the system, including the capacity of the system for serving SCE&G's customers. I will also discuss the construction projects that SCE&G is engaged in which are designed to increase the capacity, reliability, and operational flexibility of SCE&G's system.

Q. PLEASE DESCRIBE SCE&G'S NATURAL GAS DISTRIBUTION SYSTEM FROM AN OPERATIONS STANDPOINT.

A. SCE&G's natural gas distribution system consists of approximately 15,700 miles of transmission and distribution mains and related service facilities. The Company's distribution facilities range in diameter from ⅝-inch polyethylene to

20-inch steel pipe and carry natural gas under pressures typically ranging from 25 pounds per square inch gauge ("psig") to 1,100 psig in order to deliver safe, reliable natural gas service to over 307,000 factories, businesses, and homes in South Carolina. The Company also maintains 100 metered delivery points through which gas is delivered to SCE&G's system and then distributed by the Company to our customers. SCE&G currently provides natural gas service in all or part of 35 of the 46 counties in South Carolina covering approximately 23,000 square miles.

Q. PLEASE PROVIDE A BRIEF OVERVIEW OF SCE&G'S GAS PURCHASING PRACTICES FOR THE REVIEW PERIOD.

A. During the Review Period, SCE&G purchased all of its natural gas supply directly from gas suppliers. While Company Witness Jackson will testify on this subject in greater detail, SCE&G's management analyzes and considers the supply and interstate capacity assets of its business on an on-going basis in order to provide safe, reliable, and economical natural gas service in South Carolina. All of the variables related to the growth in our state and the demand of SCE&G's system must be balanced with corresponding supply and capacity needs. Finally, I want to emphasize to the Commission that the Company procured reliable and reasonably priced natural gas supplies during the Review Period.

Q. WHAT LIQUEFIED NATURAL GAS ("LNG") FACILITIES DOES SCE&G OPERATE?

A. SCE&G owns and operates two LNG facilities. These facilities are located at Bushy Park near North Charleston, and at Salley, located in western Orangeburg County. The LNG facilities allow SCE&G to store natural gas in liquid form and inject vaporized gas into SCE&G's system when needed. These assets are used primarily to help meet peak loads on the system and serve as a backup supply of gas in emergency situations.

Q. WHAT ARE THE CAPACITIES OF THE LNG FACILITIES?

A. The Bushy Park facility has the capability of converting natural gas into a liquid, a process known as liquefaction. It can store up to 980,000 Mcf (thousand cubic feet) of LNG. The Salley facility has the capability of storing up to 900,000 Mcf of trucked-in LNG. LNG must be transported to Salley via truck because Salley does not possess the ability to liquefy natural gas.

Q. PLEASE BRIEFLY DISCUSS THE BTU (BRITISH THERMAL UNIT) CONTENT OF GAS STORED AT THE COMPANY'S LNG FACILITIES.

A. An important aspect of LNG system operation is the management of the Btu content of the liquefied gas placed into storage. Since it began operating the LNG facilities in November 2006, SCE&G has closely monitored the Btu content of its LNG which increases naturally over time while in storage. This increased Btu content is caused primarily by two factors: (i) increases in the Btu content of

the gas delivered to the liquefaction plant; and (ii) the occurrence of a natural process referred to as "weathering" whereby lighter, lower Btu hydrocarbons boil off over time leaving a heavier, higher Btu content liquid.

Since November 2003, the Elba Island LNG facility, located near Savannah, Georgia, has delivered gas to SCE&G's system with increasingly higher Btu content. Some of the natural gas delivered to the Company from Elba Island is routed to SCE&G's LNG facility at Bushy Park where the gas is then liquefied for storage. After the higher Btu content gas is liquefied and placed into the Company's LNG tanks at Bushy Park and Salley, the Btu content of the gas continues to rise over time due to "weathering."

Both of SCE&G's LNG plants inject vaporized natural gas into an interstate pipeline system owned and operated by Carolina Gas Transmission Corporation ("CGTC"). CGTC in turn transports the vaporized gas, along with SCE&G's primary supply volumes, to downstream delivery points where it enters SCE&G's gas delivery system. In its tariff approved by the Federal Energy Regulatory Commission, CGTC has a limit on the Btu content of the gas that it will transport across its system. More specifically, the CGTC tariff limits the Btu content of the gas that SCE&G can inject into CGTC's interstate transmission system to 1,075 Btu per cubic foot ("Btu/ft^3"). Historically and within the past 10 years, natural gas deliveries to South Carolina from the upstream pipelines have been around 1,020 Btu/ft^3. Since SCE&G does not know how gas streams with

Btu values in excess of these tariff limits might affect combustion at the burner tips in the homes and businesses we serve, it is therefore important that SCE&G manage the Btu content of its LNG.

Q. HOW DOES SCE&G MANAGE LNG BTU CONTENT?

A. SCE&G has managed the Btu content of its LNG by planning and implementing a structured empty/refill cycle that considers both the system need for vaporized natural gas and the need to cycle the inventory for purposes of Btu management. These management activities, however, have become more challenging as a result of receiving higher Btu content gas from Elba Island. SCE&G anticipates that global market forces will continue the trend of receiving higher Btu content gas from Elba well into the future. As a result of gas arriving from Elba Island at our LNG plants at or just below the 1,075 Btu/ft^3 threshold, the Btu content of the gas in the LNG tanks will be higher than in the past. Consequently, there may be significantly less weathering time before the gas exceeds 1,075 Btu/ft^3.

To address the CGTC tariff limit and avoid impacting our customers' end-use appliances and equipment, SCE&G constructed nitrogen injection systems to manage the Btu content at both LNG facilities. These systems inject nitrogen into the gas stream during vaporization activities. When nitrogen is mixed with the vaporized gas leaving the LNG facilities, the Btu content of the gas decreases to a level that is in compliance with the CGTC tariff limit, and any customer

operational issues are also avoided. The Company completed construction of the "nitrogen blending" facilities in March 2009. This equipment and our continued inventory management program will allow us to effectively manage the Btu content of natural gas that flows across CGTC's system and into the Company's system.

Q. HAS SCE&G MADE ANY FURTHER IMPROVEMENTS TO ITS LNG FACILITIES DURING THE REVIEW PERIOD?

A. Yes. During the Review Period, the Company began upgrading the fire water supply system at its Bushy Park LNG facility. This project was driven by an amendment to federal law which required the Company to increase the volume of firewater supply available to respond to any incident at the facility. Construction of this project is complete, and the system is functional today.

In addition, the Company is in the process of upgrading the control systems at both LNG plants. This project, which primarily involves a replacement of the operator interfaces for the plant control systems, is necessary because the existing system is obsolete and no longer supported by the supplier of the components. SCE&G anticipates completing this project in December 2009.

Q. PLEASE DISCUSS THE GROWTH ON THE COMPANY'S SYSTEM.

A. In spite of extremely volatile market prices of gas over the past few years and a recent downturn in the housing market, we continue to experience growth in the number of natural gas customers across all customer classes. During the

Review Period, the total number of customers grew by approximately 1.5%. Despite this continued increase in the number of natural gas customers, the overall volume of natural gas consumed by our customers during the Review Period declined due in large part to the recent economic downturn.

Q. WHAT STEPS HAS SCE&G TAKEN TO IMPROVE AND EXPAND ITS NATURAL GAS DISTRIBUTION SYSTEM DURING THE REVIEW PERIOD?

A. Over the years, SCE&G has consistently improved and expanded its system by adding pipeline to reliably serve its new and existing customers and create operating flexibility on its system. Much of the recent expansion of the system is designed to accommodate population growth along the South Carolina coast. For example, during the Review Period, SCE&G improved its gas system in the Myrtle Beach area by completing construction of the Highway 90, Highway 9, Highway 57, and Highway 17 Bypass projects. In the Charleston area, the system expansions include the Foxbank and Montague Plantation projects which will supply natural gas to approximately seven new developments in Goose Creek and Moncks Corner. In the Beaufort area, SCE&G expanded its natural gas system to serve existing and planned developments. These improvements provide the required additional natural gas infrastructure to ensure the safe and reliable delivery of natural gas to our customers in these portions of the state.

Q. PLEASE BRIEFLY DESCRIBE THE SAFETY PERFORMANCE OF SCE&G CONCERNING ITS NATURAL GAS SYSTEM.

A. As a whole, the natural gas pipeline industry has an outstanding safety record due in part to comprehensive federal and state regulation. At the federal level, the United States Department of Transportation and the Pipeline and Hazardous Materials Safety Administration, acting through the Office of Pipeline Safety, have developed pipeline safety regulations over the years and are charged with monitoring SCE&G's compliance with these regulations. At the state level, the South Carolina Office of Regulatory Staff monitors the Company's compliance with pipeline safety regulations. These pipeline safety regulations include, among other things, provisions governing pipeline design, construction, testing, operations, maintenance, and emergency response activities. There are also specific requirements for training and qualifying personnel to work on natural gas systems, as well as additional requirements for administering integrity management programs for gas transmission pipelines.

SCE&G operates its natural gas system in full compliance with all laws and regulations. The Company employees who work on SCE&G's pipeline system and at the LNG facilities take great pride in safety performance. SCE&G's highest priority is to safeguard and protect those individuals who come into contact with the SCE&G system and product, including employees, customers, and the public at-large.

Q. WHAT ARE YOU REQUESTING OF THE COMMISSION IN THIS PROCEEDING?

A. The primary commitments of SCE&G continue to be to operate our system in a safe, reliable and efficient manner. Further, our employees are committed to providing outstanding customer service and operational excellence. During the Review Period, the Company prudently managed its business operations, which included the purchase and recovery of its gas supplies and administration of the PGA. Therefore, on behalf of SCE&G, I respectfully request the Commission find that the Company has recovered its gas costs for the Review Period consistent with its tariffs and Commission orders and that it has purchased its gas supplies and administered the PGA in a prudent and reasonable manner.

Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

A. Yes.